REMARKS

In the Office Action of November 8, 2006, the Examiner rejected claims 1-39. In response, Applicants are providing the following remarks, and respectfully request reconsideration of the Application.

Rejection Under 35 U.S.C. §103

In paragraph 2 of the Office Action, the Examiner rejected claims 1-39 under 35 U.S.C. §103(a) as being unpatentable over Cramer et al. (USPN 6,920,579, hereinafter *Cramer*) and Washington (USPN 5,860,116, hereinafter *Washington*). Applicants traverse.

Cramer does not teach the use of memory pages to store file service data

Independent claim 1 recites, in part, "allocating the file service data to at least one memory page in the first storage filer based on the identification." A memory page is an organized block of data that may be transferred as a unit. In exemplary embodiments, by aggregating all the data of the file service data into specific memory page(s) based on the identification, the storage filer can quickly transfer service by transferring the memory pages associated with the service. This process is quick because the large number of data in the file service data is transferred without individually transferring each object of the file service data. For example, if the number of objects of the file management data structures is in the millions, copying each object is impractical and cannot occur within time constraints for transferring the service. (*see* [00118]).

According to one embodiment, the storage filer may allocate the file service data, including file management data structures and state information for a TCP connection to the memory page based on an associated virtual server ID that is

unique within a cluster of storage filers. The storage filer may also tag the file service data with the virtual server ID. By allocating the file service data to a memory page by virtual server ID and tagging the file service data, quick and efficient transfer of the service may occur. (*see* [00114]).

The cited portion of *Cramer* discloses storing "information regarding the operation of the filer" in a non-volatile random access memory or a mass storage device. The storing of information in a NVRAM or mass storage is merely a storage dump (i.e., storing information without any organization) and is not the equivalent of storing in memory pages. In other words, the information is stored, but not in an organization manner whereby only necessary information may be operated upon (e.g., copied, transferred, etc.) based on the organization, as is the case with memory pages.

Cramer stores information regarding the operation of a first filer (e.g., file server) in NVRAM in order to allow a second filer time to access the NVRAM and control the operations of the first filer. *Cramer* does not contemplate the "transferring the at least one memory page using the identification from the first storage filer to a second storage filer." As a result, *Cramer* does not rely on the quick transfer of service afforded by memory pages. In fact, *Cramer* teaches storing "a mirror image copy of the information" and does not contemplate the efficiency or speed of the storage.

Cramer clearly does not contemplate the use of memory pages in a file service clustered environment as claimed in claim 1. The addition of *Washington* does not cure this deficiency as is clearly discussed below. Therefore claim 1 is not obvious over *Cramer* in view of *Washington*. Claims 2-9 depend from claim 1, and are therefore not obvious for the same reasons as claim 1.

Independent claims 10, 19, 20, 30, and 39 contain a similar limitation of having memory pages with file service data of the file service for the first storage filer. Therefore, these claims are not obvious for the same reasons as that of claim 1. Claims 11-18, 21-29, and 31-38 depend from claims 10, 20, and 30. For at least the same reasons as those of their independent base claims, claims 11-18, 21-29, and 31-38 are not obvious.

Washington does not provide transferring of memory pages having file service data

Claim 1, recites in part "transferring the at least one memory page using the identification from the first storage filer to a second storage filer." The at least one memory page comprises the file service data which has been allocated to the memory page (i.e., "allocating the file service data to at least one memory page in the first storage filer...").

A close reading of *Washington* provides that the memory pages are of general data stored in main memory. When remote access to a memory location is greater than local access, the page of memory may be relocated or the page of memory may be copied to the requesting processor if the page is read only. (Col. 4, lines 1-6). As such, *Washington* does not teach transferring memory pages having file service data.

Washington clearly does not contemplate the transfer of memory pages having file service data as claimed in claim 1. Therefore claim 1 is not obvious over *Cramer* in view of *Washington*. Claims 2-9 depend from claim 1, and are therefore not obvious for the same reasons as claim 1.

Independent claims 10, 19, 20, 30, and 39 contain a similar limitation of transferring memory pages with file service data. Therefore, these claims are not obvious for the same reasons as that of claim 1. Claims 11-18, 21-29, and 31-38 depend from claims 10, 20, and 30. For at least the same reasons as those of their independent base claims, claims 11-18, 21-29, and 31-38 are not obvious.

Washington is not analogous art

Embodiments of the present invention are directed to transparent movement of file services in a clustered environment. In exemplary embodiments, the file service is for access of stored information within a storage network, whereby the information is stored in shared storage devices such as, for example, disks and tapes. The claims of the present Application clearly are directed to file service associated with a storage network.

A close reading of *Washington* indicates that *Washington* is directed to a single multi-processor, ***multi-main memory computer system*** (emphasis added). The sharing of information in *Washington* is between two processors of a single system for memory pages of main memory that contain information that is accessed remotely more than it is accessed locally. There is no teaching of a network, much less a storage area network, or the use of storage filers.

As a result of Washington being non-analogous art, there is no motivation to combine

Washington is directed to information sharing in multi-processor, multi-main memory computer system whereby memory pages of frequently accessed data may be moved or copied to a requesting processor. *Cramer* is directed to files services in an environment comprising a cluster of file servers whereby one server may take over functions of another server. *Washington* teaches a single computer system comprising multiple processors which access data within memory pages. If the system in *Washington* shuts down, regardless of the use of memory pages between the two processors on the system, there is no backup or "take over" of file services. The system in *Washington* simply shuts down. *Washington* does not teach the use of memory pages to transmit any information, much less memory pages comprising file service data, from one storage filer to another. These two concepts are distinct

from each other and are in no way related. As such, one skilled in the art would not be motivated to combine *Washington* with *Cramer*. Therefore, the claims of the present Application are not obvious over *Cramer* in view of *Washington*.

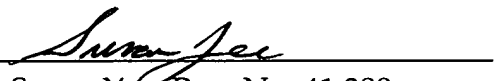
Conclusion

Based on the foregoing remarks, Applicants believe the rejections to the claims have been overcome, and that the present Application is in condition for allowance. If the Examiner has any questions regarding the case, the Examiner is invited to contact Applicants' undersigned representative.

Respectfully submitted,

Jonathan S. Goldick et al.

Date: February 6, 2007

By: 

Susan Yee, Reg. No. 41,388
Carr & Ferrell LLP
2200 Geng Road
Palo Alto, CA 94303
Phone: (650) 812-3400
Fax: (650) 812-3444